

Radix-2 trellis with four states, digital transmission  
Example: Branch metric  $ZM=[2\text{-Hamming distance}(s,e)]$

Figure 1 is a trellis diagram illustrating the Viterbi algorithm for decoding a convolutional code. The diagram shows four rows of states (A, B, C, D) and five steps (Step 1 to Step 4). States are represented by circles containing a number. Transitions are labeled with branch metrics (0, 1, 2) and path metrics (PM). The trellis is divided into four sections by vertical lines labeled  $t_0$ ,  $t_1$ ,  $t_2$ ,  $t_3$ , and  $t_4$ . The path metrics are shown in parentheses next to the state numbers. The final decoded sequence is shown at the bottom: 0 1 1 0 ...

FIG. 1

ANNOTATED SHEET SHOWING CHANGES

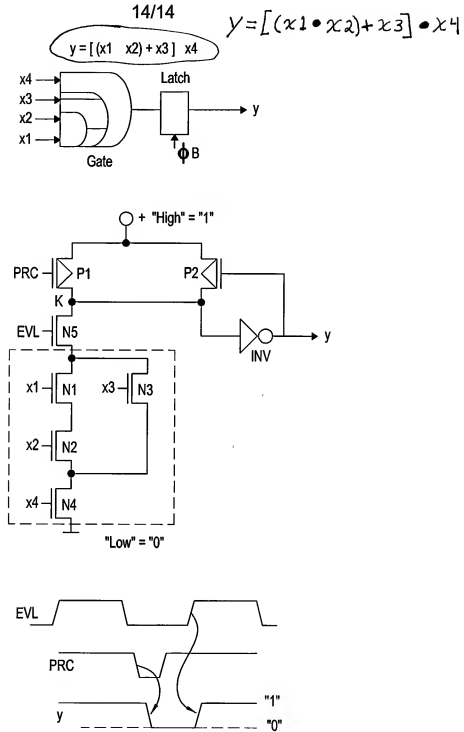


FIG. 14